GOVERNMENT OF INDIA
ENVIRONMENT AND FORESTS
LOK SABHA

UNSTARRED QUESTION NO:2208
ANSWERED ON:29.07.2002
ECO-HAZARDS OF BT COTTON CROP
AJAY SINGH CHAUTALA;MAHBOOB ZAHEDI

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether the Government have conducted any study on the eco-hazards as well as profitability of BT Cotton Crop;

(b) if so, the details thereof;

(c) whether benefits of this crop are sustainable for a long time;

(d) if so, the details thereof and if not, the reasons therefor;

(e) the name of States which have started growing BT Cotton so far; and

(f) the steps taken by the Government to remove the eco-hazards of BT Cotton Crop?

Answer

MINISTER FOR ENVIRONMENT AND FORESTS (SHRI T.R.BAALU)

(a) to (f) Studies on Bt cotton were conducted by the Maharashtra Hybrid Seed Company (MAHYCO) as per the protocols developed and approved by the Review Committee on Genetic Manipulation (RCGM) of the Department of Biotechnology. These studies were evaluated by the Monitoring and Evaluation Committee (MEC) of the Department of Biotechnology. The Indian Council of Agricultural Research (ICAR) also conducted large scale field trials of these Bt cotton hybrids under its All India Coordinated Project. The environmental safety assessment of Bt cotton hybrids included: pollen escape, aggressiveness and weediness, effect on non-target organisms, presence of Cry 1Ac protein in soil, effect of Cry 1Ac protein on soil microflora, and baseline susceptibility studies. For evaluating food safety, the studies conducted included: compositional analysis, allergenicity studies, toxicological study, presence of DNA and protein in Bt cottonseed oil and feeding studies on fish, chicken, cows and buffaloes. These studies did not reveal any adverse impact. Agronomic evaluation of Bt cotton hybrids over a three year period indicated that Bt cotton hybrids show substantial increase in the average number of bolls per plant as well as the yield. The total number of insecticidal sprays on Bt cotton was reduced from seven to two. Based on these biosafety evaluation studies, conditional approval was accorded for commercial cultivation of three Bt cotton hybrids.

The States that have started to grow Bt cotton so far are: Maharashtra, Madhya Pradesh, Tamilnadu, Karnataka, Andhra Pradesh and Gujarat.